Unit Outline

ISAD3001 (V.2) Capstone Computing Project 2
Semester 1, 2025

Unit study package number:	ISAD3001
Mode of study:	Internal
Tuition pattern summary:	Note: For any specific variations to this tuition pattern and for precise information refer to the Learning Activities section. Individual Study: 1 x 9 Hours Weekly Workshop: 1 x 2 Hours Weekly This unit does not have a fieldwork component.
Credit value:	25
Pre-requisite units:	ISAD3000 (v.0) Capstone Computing Project 1 or any previous version
Co-requisite units:	Nil
Anti-requisite units:	Nil
Result type:	Grade/Mark
Approved incidental fees:	Information about approved incidental fees can be obtained from our website. Visit https://www.curtin.edu.au/students/essentials/fees/understanding-your-fees for details.
Unit coordinator:	**Name:** Dr Hannes Herrmann **Phone:** 08 9266 3309 **Email:** Hannes.Herrmann@curtin.edu.au **Location** Building: 314 - Room: 342 **Consult:**
Teaching Staff:	**Name:** Mrs Geethanjali Wimalaratne **Phone:** 0117544118 **Email:** Geethanjali.Wimalaratne@curtin.edu.au **Location** Building: TBC - Room: TBC
Administrative contact:	**Name:** Roshen Randomba Arachchi **Phone:** +94 11 754 4215 **Email or Website:** roshen.a@sliit.lk **Location** Building: Curtin Colombo, No: 80, Nawam Mawatha, Colombo 02 - Room: Academic Administration, Ground Floor
Learning Management System:	Blackboard

Acknowledgement of Country

Curtin University acknowledges all First Nations of this place we call Australia and recognises the many nations who have looked after Country for more than 60,000 years. We are honoured and grateful for the privilege to maintain campuses operating in Boorloo (Perth) and Karlkurla (Kalgoorlie) in Australia. We pay our respects to Elders past and present as Custodians and Owners of these lands. We recognise their deep knowledge and their cultural, spiritual and educational practices, and aspire to learn and teach in partnership with them. Curtin also acknowledges First Nations peoples connected with our global campuses. We are committed to working in partnership with all Custodians and Owners to strengthen and embed First Nations' voices and perspectives in our decision-making, now and into the future.

Syllabus

Students continue the projects that were designed and planned in Capstone Computing Project 1. Each student will be assigned a staff member as a supervisor and a client (or client group). Supervisors assist in the details of the project relating to the unit and advise students on best practice. Students develop the project implementation for the client(s) and thus meet with them regularly for progress updates and to obtain feedback. All development is carried out using industry best-practice, including the use of an agile methodology and the use of tools such as an online repository. Projects are usually carried out in small groups of three to four students, although this can vary with the project. Teams may include students from other discipline areas where a project requires this.

Introduction

Students work in assigned groups to complete a project that is as close as possible to ones that may be encountered in the workplace. Students will use formal development procedures, including sharing and merging code via a repository (BitBucket) and using a formal Agile development methodology. Each group works for a client who guides them in the progress and sets the requirements for the project. A supervisor from the Discipline of Computing tracks the group's progress and can provide advice as needed. Students whose project clients are industry partners will work onsite with the partner's development team and receive guidance from software professionals.

Groups undertake real projects, which means a number of real-life issues may occur. Students are strongly advised to treat this unit as a job, and to approach any issues appropriately. They should be sure to consult their supervisor if difficulties arise, and to keep all documentation updated.

Students are expected to meet with their client for at least half an hour every week, and to spend at least ten hours per week on the project (including the non-contact weeks), but as with other units, students may be required to commit more than ten hours on some weeks. As with real life devopment, some flexibility may be required if problems arise, and students are encouraged to plan ahead accordingly.

This unit, in line with current research and university values, strives to achieve a positive and inclusive educational environment. This supports improved academic performance, increased confidence and creates a greater sense of safety and belonging. Your teaching team is committed to providing a safe and inclusive learning experience and requires students to take reasonable and appropriate measures to actively eliminate discrimination on the basis of ability; cultural and social background; and diverse sex, sexuality, and gender.

Unit Learning Outcomes

Curtin University's six Graduate Capabilities indicate to employers that graduates possess discipline knowledge and valuable skills. Each course unit addresses these capabilities through specific learning outcomes, which outline what

students need to know and do to succeed. Assessments are designed to test these outcomes, ensuring that upon completion, students have met all learning objectives.

Your course has been designed so that on graduating you will have achieved all of Curtin's Graduate Capabilities through the assurance of the learning process in each unit.

	On successful completion of this unit student can:	Graduate Capabilities addressed
1	Use project management skills to manage a software project of significant scope, and evaluate project outcomes	
2	Reflect on, evaluate and communicate personal contributions to a project	
3	Integrate existing technical knowledge and skills on a software project of significant scope	
4	Identify project problems and formulate solutions based on the adopted software development process	
5	Access and critically evaluate technical literature to solve new problems	
6	Integrate and apply existing technical knowledge and skills to an area related to the students' course or major of study	

Curtin's Graduate Capabilities

	Apply discipline knowledge, principles and concepts		**Innovative, creative and entrepreneurial**		**Effective communicators with digital competency**
	Globally engaged and responsive		**Culturally competent to engage respectfully with local first people and other diverse cultures**		**Industry connected and career capable**

Find out more about Curtin's Graduate Capabilities.

Learning Activities

Much of the learning in this unit takes place through private work or group discussion. Supervisors are available to assist with aspects of the progress relating to the unit such as use of BitBucket. Students should undertake this project only in the final two semesters of their study, and as such should already have many of the skills required; this unit requires that the students apply these skills to a real-world project. It is expected that a large amount of self-learning will be required, in a similar manner as will happen when the student obtains their first development job.

Additional skills needed for the project, such as the use of Agile methodology, are covered in the pre-requisite for this unit.

Learning Resources

No resources provided

Assessment

Assessment policy exemptions

There are no exemptions to the assessment policy

Assessment Schedule

	Task	Value %	Date Due	Unit Learning Outcome(s) Assessed	Late Assessments Accepted?	Assessment Extensions Considered? *
1	Milestones	55 %	**Week:** Ongoing (see calendar at end) **Day:** Friday (see calendar at end) **Time:** Normally at 5pm Western Australian Standard Time	1,2,3,4,5	Yes	Yes
2	Final Submission	25 %	**Week:** 13, Teaching Week 12 **Day:** Friday **Time:** 5pm Western Australian Standard Time	2,4,5,6	Yes	Yes
3	Presentation	20 %	**Week:** 14 **Day:** Early week (Monday and Tuesday) **Time:** Starting 9am	2,3	No	No

*Please refer to the Late Assessment and the Assessment Extension sections below for specific details and conditions.

Detailed Information on assessment tasks

Milestones

The milestones are used to track your progress, and roughly correspond to the sprint reports from the pervious version of this unit. The difference is that you don't need to submit everything. More details on this will be available via Blackboard and from your supervisor(s).

Late assessments that negatively impact other group members will not be accepted - you are generally expected to have merged your code with that of your group and if you haven't done that, it won't count for this sprint. Extensions that impact group members will not be accepted for the same reason. This is a group project, and part of the milestone assessment is group based. Late assessment and extensions may be accepted for parts that do not affect the rest of the group, or if we can find away to minimize such impact. A more common thing is to let a student who has a legitimate reason, add their work to the next sprint/milestone.

Note that the proportion of group marks you receive is based on your contribution - this specifically means the amount of tasks that you have completed in that sprint, tested properly, and had merged with the group's code via a refereed pull request. The share of the group's mark you get can change with moderation - as usual, your marks are not final until your co-supervisor has moderated the marks.

Final Submission

These are the development, documents and reports of any implementation for the semester, which you will be submitting as part of sprint reports. Be sure to read the specifications for this assessment carefully. You will be marked on the material submitted according to the specifications, which may mean getting a mark not directly related to the perceived quality of your project work. This mirrors an industrial situation where your work is generally assessed by problems caused and your reporting skills. You will have to give proof of your claims.

Groups working on industry projects will generally receive these marks from their industry sponsor but they will be moderated by Curtin staff.

Late assessments that negatively impact other group members may not be accepted. Extensions that impact group members will not be accepted. This is a group project, and part of the milestone assessment is group based. Late assessment and extensions may be accepted for parts that do not affect the rest of the group, or if we can find away to minimize such impact.

Presentation

Each group and group member will be required to present the work that they have completed that semester. Final presentations will be in an open session and staff and students are invited to attend as well as industry and the general public. The aim is to hold presentations on Monday and Tuesday, May 27 and 28, with the exception of any presentations covered by NDAs that prevent them from public viewing. Industry presentations that are presented on-campus will be on Tuesday.

Please note the time and date of the presentation session and make yourself available. If you have work or other commitements, organize early to be able to work around the presentations.

Because of the group-based nature of the presentation, extensions will not be considered. It is not possible to readily re-create the environment for a fair assessment at another time.

By university policy, this date is subject to class approval. You will be contacted about this early in the semester by the UC.

Pass requirements

To pass the unit a student must:

- have contributed (and been accepted as having contributed, based on evidence) at least half of the hours required; and
- demonstrate meeting ULO 1, 2 and 3 by submitting more than half of the individual milestone reports and having contributed to the group reports (based on evidence); and
- demonstrate meeting ULO 4 and 5 by completing a reasonable number of tasks (based on their complexity and GIT evidence); and
- demonstrate meeting ULO 6 through addressing these requirements in the individual final report; and
- be a part of a group that has a valid requirements document, signed by the required parties; and
- score 50% or more overall.

Assessment Moderation

Fair assessment through moderation

Moderation describes a quality assurance process to ensure that assessments are appropriate to the learning outcomes, and that student work is evaluated consistently by assessors. Minimum standards for the moderation of assessments are described in the Assessment and Student Progression Manual.

Pre-marking moderation

This unit complies with moderation of assessments as described in the Assessment and Student Progression Manual, available from policies.curtin.edu.au/findapolicy/

The assessments for this unit are the same every time, but apply differently to different students and groups. Pre-marking moderation occurs in sprint meetings between campus leads and interested supervisors.

Intra-marking / Post-marking moderation

This unit complies with moderation of assessments as described in the Assessment and Student Progression Manual, available from policies.curtin.edu.au/findapolicy/

Every group has a moderator assigned, who will moderate the marks given. Marks are not final until moderation is completed. Presentations are assessed by multiple markers and the mark given is the median of what each marker gives. Post-marking moderation is carried out by the project lead at each campus, while the marking of the project lead is moderated by the UC.

Late Assessment

Where the submission of a late assessment is permitted, late penalties will be consistently applied in this unit.

Where a late assessment **is** permitted for an assessment item or the entirety of the unit (refer to the Assessment Schedule table in this Unit Outline) and the student does not have an approved assessment extension:

1. For assessment items submitted within the first 24 hours after the due date/time, students will be penalised by a deduction of 5% of the total marks allocated for the assessment task;
2. For each additional 24 hour period commenced an additional penalty of 10% of the total marks allocated for the assessment item will be deducted; and
3. Assessment items submitted more than 168 hours late (7 calendar days) will receive a mark of zero.

Where late assessment **is NOT** permitted for an assessment item or the entirety of the unit (refer to the Assessment Schedule table in this Unit Outline) and the student does not have an approved assessment extension:

1. All assessment items submitted after the due date/time will receive a mark of zero.

Assessment Extension

Where an application for an assessment extension **is** permitted for an assessment item(s) within this unit (refer to the Assessment Schedule table in this Unit Outline):

1. A student who is unable to complete an assessment item by/on the due date/time as a result of exceptional circumstances beyond the student's control, may apply for an assessment extension on the Assessment Extension Form and within the student OASIS (My Studies tab – Quick Forms) account.
2. Submit the application for an Assessment Extension with supporting documentation via the online form.
3. An application may be accepted up to five working days after the due date/time of the assessment item where the student is able to provide a verifiable explanation as to why they were not able to submit the application prior to the assessment due date/time.

Where an application for an assessment extension **is NOT** permitted for an assessment item(s) within this unit (refer to the Assessment Schedule table in this Unit Outline):

1. All assessment items submitted after the due date/time will be subject to late penalties or receive a mark of zero depending on the unit permitting late assessment submissions.

Deferred Assessments

If your results show that you have been granted a deferred assessment you should immediately check OASIS for details.

Further Assessments

Further assessments, if granted by the Board of Examiners, will be held between 14/07/2025 to 19/07/2025. Notification to eligible students granted a further assessment will be made after the Board of Examiners meeting via the Official Communications Channel in OASIS.

It is the responsibility of the student to be available to complete the requirements of a further assessment. If your results show that you have been granted a further assessment you should immediately check OASIS for details.

Reasonable adjustments for students with disabilities/health circumstances likely to impact on studies

A Curtin Access Plan (CAP) is a document that outlines the type and level of support required by a student with a disability or health condition to have equitable access to their studies at Curtin. Carers for people with disability may also be eligible for support. This support can include alternative exam or test arrangements, study materials in accessible formats, access to Curtin's facilities and services or other support as discussed with an advisor from AccessAbility Services.

Documentation is required from your treating Health Professional to confirm your health circumstances or carer responsibilities.

If you think you may be eligible for a CAP, please contact AccessAbility Services. If you already have a CAP, please provide it to the Unit Coordinator in week 1 of each study period.

Referencing style

IEEE

Referencing style url

https://ieeeauthorcenter.ieee.org/wp-content/uploads/IEEE-Reference-Guide.pdf

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Privacy

Curtin's privacy statement describes how personal information is handled. Curtin may record or transmit your image or voice during learning activities or class participation, both on campus and internationally. Students may also record for study purposes but must not share these recordings publicly and must seek permission from those recorded. Recordings cannot be used for commercial purposes or shared beyond personal study. Breaching the privacy policy or procedures may lead to disciplinary action under Statute No 10. For privacy concerns, please contact your Unit Coordinator.

Copyright

Academic Integrity

Curtin's Student Charter, Academic Integrity Program (AIP), and core Values guide expectations regarding student behaviour and responsibilities. Information on these topics can be found on the Academic Integrity Website.

Appropriate Use of Generative Artificial Intelligence (Gen-AI) technologies

Curtin supports the philosophy of teaching students to appropriately use Gen-AI technologies in an ethical and responsible way. Gen-AI technology is rapidly evolving and being incorporated into software programs, so it is important to understand how it can and cannot be used within your studies.

Check your assessment instructions carefully before using any Gen-AI software (e.g. Chat GPT, Midjourney, GitHub Copilot, etc.). You are not permitted to use Gen-AI software in any assessment task unless written permission is explicitly granted by the Unit Coordinator (e.g. within Blackboard or the assignment specifications). Where use of Gen-AI is approved, you must use it in accordance with those instructions. Unapproved, inappropriate, or undisclosed use may be dishonest or unfair behaviour, and thus considered misconduct.

Visit the appropriate use of Gen-AI technologies website and library website on Gen-AI for more information.

Academic Integrity Warnings

An Academic Integrity Warning may be issued to a student in limited circumstances and only where misconduct is not involved.

Academic Misconduct

Staff members are required to report suspected misconduct. Academic misconduct means conduct by a student that is dishonest or unfair in connection with any academic work. This includes all types of plagiarism, cheating, collusion, falsification or fabrication of content, and behaviours like falsifying medical certificates for extension. Contract cheating, the use of file sharing, translation services/apps, paraphrasing tools (text-spinners), article generators, unapproved and inappropriate use of Gen-AI tools, and assignment help websites also may be considered academic misconduct. The longer term personal, social, and financial consequences of misconduct can be severe, so please ask your tutors or unit coordinator if you need clarification or are unsure what to do.

Information and Communications Technology (ICT) Expectations

Curtin students should ensure they have reliable internet access to connect to OASIS email, Blackboard or other Learning Management Systems, and Library Services. A computer or mobile device may be necessary for preparing and submitting assignments.

You may be required to use remote invigilation software like IRIS or Respondus Monitor with Lockdown Browser to verify your identity and monitor your behavior during online assessments. This requires a computer, webcam, microphone, and reliable internet access. If you don't have access to the necessary equipment, you can use the resources available at the Curtin University Library.

For general ICT assistance, please visit the IT tools and guides website. For study resources and assistance, check out the UniSkills website.

Some projects may have additional ICT requirements for groups to be able to apply for them, such as a certain number of members having Android phones. If you apply for such a project you are agreeing to meet this requriement, and problems with this (for example if a phone is lost or breaks) must be addressed by the group.

Resources to be supplied by project sponsors are the responsibility of the department and the sponsor.

Additional information

As mentioned above, this unit tests the skills learned during the course of your studies. As such, you must be as close as possible to completing your studies in order to enrol in this unit. Ideally you would be starting the final year of your studies, but in special cases you may be permitted to enrol if you have completed at least 300 credit points and not enrolling would unduly extend your studies.

Enrolment

It is your responsibility to ensure that your enrolment is correct - you can check your enrolment through the eStudent option on OASIS, where you can also print an Enrolment Advice.

Student Rights and Responsibilities

Students must be aware of all relevant legislation, policies, and procedures concerning their rights and responsibilities. This information is available on the student rights and responsibilities website.

Student Equity

Several factors might hinder students from performing their best in studies or assessments, such as disabilities, medical conditions, significant caring responsibilities, pregnancy, religious practices, remote living, or other reasons. If you believe you are unfairly disadvantaged, contact the appropriate service. University staff can only assist if they are aware of your circumstances, so please reach out for help.

To discuss your needs in relation to:

1. Disability or medical conditions, contact AccessAbility Services
2. Elite athletes, contact Elite Athlete Coordinator
3. All other grounds, contact the Student Wellbeing Advisory Service

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Recent Unit Changes & Response to Student Feedback

Students are encouraged to provide feedback through student surveys (such as Insight and the annual Student Experience Survey) and interactions with teaching staff.

Listed below are some recent changes to the unit as a result of student feedback.

There have been only minor changes since 2021. This unit is about coding, and that hasn't really changed.

I spent 2021 refining minor points and producing more documentation for supervisors since the unit has gone to more campuses this year.

In 2020, the following changes were made:

- Changed assessment profile, including the use of milestones and a final hand-over.
- Formal process for the selection of the final presentation date.

In 2019, the following changes were made:

- The assessment details on Blackboard have been restructured to reduce confusion.
- The final submission has been broken up and attached to the scrum reports to maximize feedback given to students.
- All assessments will go through Blackboard to make it easier for a co-supervisor or co-marker to access all relevant student work.

In 2018, the following changes were be made:

- Groups will get more direct feedback from the supervisor on the initial few scrum reports and will be meeting with their supervisor more regularly.
- There will be no big end-of-semester presentation event for ISAD3000. Instead, each group will present only to the marking panel and the client(s) in order that verbal feedback can be given. We feel that this is an important part in improving the presentations for the big end-of-second-semester presentation event and for student learning. This means that the presentations at the end of semester will only be from students in this unit and ISAD4001.
- Group sizes increase from 3-4 to 4-5 based on research that Aneesh found.

Program Calendar

Week	Begin	Session 1	Assessment
0.	17 February	**Orientation Week**	
1.	24 February	Welcome, Testing	**Document Resubmission**
2.	3 March	Assessment Briefing	
3.	10 March		**SR 1, Branching Plan**
4.	17 March		(Optional) **ITP Metrics**
5.	24 March		
6.	31 March		**SR 2**
7.	7 April		
8.	14 April	**Tuition Free Week**	
9.	21 April		**SR 3**
10.	28 April		
11.	5 May		
12.	12 May		**SR 4**
13.	19 May		**Handover**
14.	26 May	**Study Week**	**Presentation, Final Submission**

SR # stands for the sprint reports that make up the deliverables mark.